

AMENDMENT TO SPECIFICATION

Please replace the paragraph beginning on page 1, line 9 and extending to page 2, line 14 with the amended paragraph:

Generally, diamond cutting saw blades are comprised of a circular ~~softer metal~~ plate or disk made of soft metal, such as bronze or steel, having abrasive materials mounted along the entire periphery of the circle as shown in FIG. 1A. The abrasive materials are usually mounted to the periphery of the metal disk by a mechanical press-mounting method, and they are typically composed of diamond particles, so as to form a continuous-rim diamond circular saw blade 10a with an excellent cutting effect. However, the diamond circular saw blade 10a is made of soft metal sheet materials, and the strength of the plate is usually insufficient for general-purpose, high-speed cutting. In order to improve this disadvantage, R&D of industrial circles provide a segmented-rim diamond circular saw blade 10, which is manufactured by employing a sintering method as shown in FIG. 1. The segmented-rim of diamond circular saw blade 10 is composed of industrial-grade diamond particles and other metal powder materials together, with which are placed in a specially made mold, by a cold press manner to form a powder lump. In order to reinforce its strength, a high temperature of 850°C is required to form a arc-shaped diamond-metal bars 101 of reinforced composite diamond material. The arc-shaped diamond-metal bars 101 are then welded to the periphery of a

circular steel disk 120 having an axle bore, so as to form the segmented-rim diamond circular saw blade 10. Nevertheless, the circular saw blade 10 manufactured by a sintering method as described above requires high-cost industrial-grade diamond particles and other metal powder. In addition, the process of mixing diamond particles with the other metal powders may cause pathological changes to operators' skins. Furthermore, the peripheral equipment system of manufacturing is very costly, and it consumes a large amount of electrical energy with very minute and complicated processes and causes air pollution. As a result of its high production cost, the unit price of the product is very high, which is several times the unit price of the continuous-rim diamond circular saw blade 10a manufactured by a mechanical press-mounting method. Therefore, industries' demand for low-cost products cannot be met. In addition, the cutting performance of the segmented-rim diamond circular saw blade 10 (FIG. 1) manufactured by a sintering method is inferior to that of the continuous-rim diamond circular saw blade 10a (FIG. 1A) manufactured by a mechanical press-mounting method.